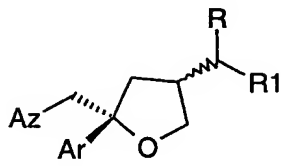
We Claim:

1. A compound having the structure of Formula I,

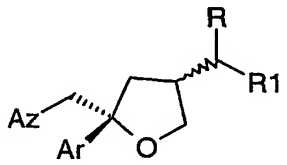


Formula I

and its pharmaceutically acceptable salts, enantiomers, diastereomers, N-oxides, prodrugs, metabolites, polymorphs , pharmaceutically acceptable solvates,

wherein

Az is a five to seven membered heterocyclic ring having one to four



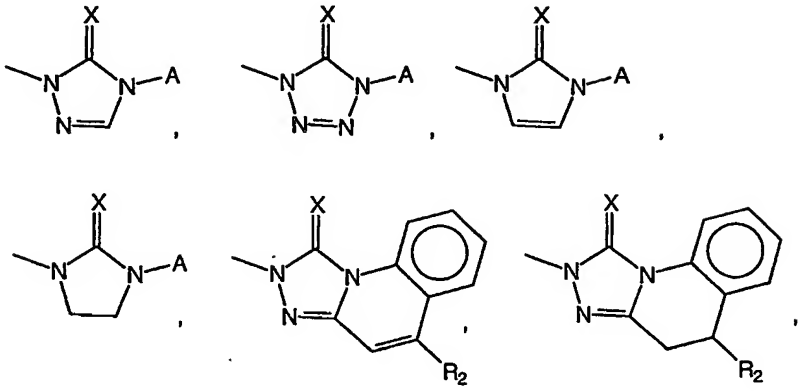
Formula I

heteroatoms selected from N, S, or O; the preferred heterocyclic ring is 1,2,4-triazol-1-yl ;

Ar is a five to seven membered heterocyclic ring containing one to four heteroatoms selected from the group consisting of oxygen nitrogen and sulphur; phenyl or a substituted phenyl group having one to three substituents independently selected from halogen (e.g. chlorine, fluorine, bromine or iodine), nitro, cyano, lower(C_1-C_4) alkyl, lower (C_1-C_4) alkoxy or a perhalo lower (C_1-C_4) alkyl, perhalo lower(C_1-C_4) alkoxy ; the preferred heterocyclic rings are thienyl and pyridyl;

R is H or methyl;

R_1 is selected from the group consisting of



wherein

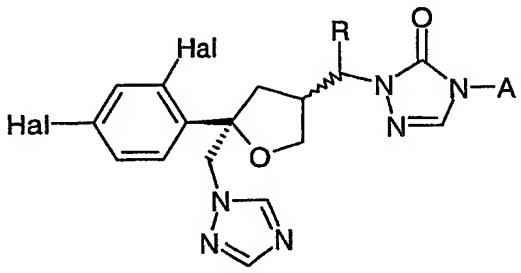
X is selected from the group consisting of CH_2, O, S and SO_2;

R_2 is hydrogen or lower(C_1-C_4) alkyl;

A is hydrogen, lower(C_1-C_4) alkyl, phenyl or phenyl substituted by one or more of groups independently selected from halogen (e.g. chlorine, fluorine, bromine or iodine atoms), nitro, cyano, hydroxy, lower(C_1-C_4) alkyl, lower (C_1-C_4) alkoxy or perhalo lower (C_1-C_4) alkyl, perhalo lower (C_1-C_4)alkoxy ; substituted or unsubstituted five or six membered heterocyclyl ring systems containing one to four hetero atoms chosen from N, O and S, said heterocyclyl substituents being (C_1-C_8) alkanoyl, lower (C_1-C_4) alkyl, lower (C_1-C_4) alkoxy carbonyl, N, N-di(lower alkyl) (C_1-C_4) amino carbonyl, aminothiocarbonyl, N-lower(C_1-C_4) alkyl aminothiocarbonyl, N,N-di(lower alkyl) (C_1-C_4) aminothiocarbonyl, lower (C_1-C_4) alkyl sulfonyl, phenyl substituted lower (C_1-C_4) alkyl sulfonyl, N-lower (C_1-C_4) alkylamino, N, N-di(lower alkyl) (C_1-C_4) amino, 1,3-imidazol-1-yl, 2-loweralkyl(C_1-C_4) sulfenyl-1,3-imidazol-1-yl, pyridinyl, thaizolyl, 1,2,4 triazol-4-yl or phenyl or phenyl substituted by one or more of groups independently selected from halogen (chlorine, fluorine, bromine or iodine), perhalo lower(C_1-C_4) alkyl, (C_2-C_8) alkanoyl, lower(C_1-C_4) alkyl, lower(C_1-C_4) alkyl substituted by one or more hydroxy group, lower(C_1-C_4)

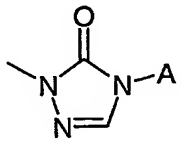
alkoxy, nitro, cyano, hydroxy, 1,2,4-triazolyl, 1,3-imidazolyl, 1,2,3,4-tetrazolyl.

2. The compound of claim 1 having the structure of the Formula II



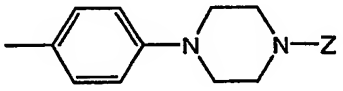
Formula II

(Formula I, wherein Az is 1,2,4-triazol -1-lyl; R is H or CH_3; Ar is 2, 4-dihalo substituted phenyl, Hal is Cl, F, Br or I; and R_1 is



wherein A is the same as defined in claim 1.

3. The compound of claim 2 having the structure of Formula II, wherein A is represented by



Z is a hydrogen, (C_1-C_8) alkanoyl, lower alkyl, (C_1-C_8) perhaloalkanoyl, or phenyl, phenyl substituted by one or more of groups independently selected from nitro, cyano, halogen (chlorine, fluorine bromine, iodine) perhalo lower(C_1-C_4) alkyl, perhalo lower(C_1-C_4) alkoxy; (C_2-C_8) alkanoyl, lower(C_1-C_4) alkyl, lower (C_1-C_4)alkyl substituted by one or more hydroxy

group, lower(C_1-C_4) alkoxy, 1,3-imidazolyl, 1,2,4-triazolyl, 1,2,3,4-tetrazolyl, or OCH_2Y;

wherein Y is phenyl or phenyl substituted by one or more of groups independently selected from nitro, cyano, halo, perhalo lower alkyl, (C_2-C_8) alkanoyl lower alkyl, hydroxy, lower alkyl substituted by one or more hydroxy group, lower alkoxy, 1,3-imidazolyl, 1,2,4-triazolyl or 1,2,3,4-tetrazolyl.

4. A compound selected from the group consisting of:

2-[(5R,3R)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-{4-[4-(phenyl)-1-piperazinyl]-chlorophenyl}-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3S)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(phenyl)-1,2,4-triazol-1-yl]-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3S)-5-(2,4-Diflurophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(hydroxyphenyl)-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3R)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(1,2,4-triazol-1-yl-methyl)-phenyl-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3S)-5-(2,4,Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-{4-[4-(phenyl)-1-piperazinyl]-chlorophenyl}-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3S)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(benzyloxy)-phenyl]-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3S)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-{4-[4-[4-(benzyloxy)-phenyl]-1-piperazinyl]-phenyl}-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3R)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(2,2,3,3-tetrafluoropropoxy)-phenyl]-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3R)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(1,2,3,4-tetrazol-1-yl)-phenyl]-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

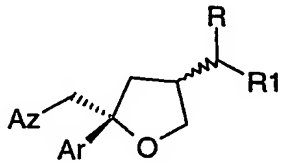
2-[(5R,3S)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(2,4-dichlorobenzyloxy)-phenyl]-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3R)-5-(2,4-Difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-{4-[4-[4-(benzyloxy)-phenyl]-1-piperazinyl]- phenyl}-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

2-[(5R,3R)-5-(2,4-difluorophenyl)-tetrahydro-5-(1*H*-1,2,4-triazol-1yl-methyl)-furan-3-yl-methyl]-4-[4-(2,4-dichlorobenzyloxy)-phenyl]-2,4-dihydro-3(2*H*,4*H*)-1,2,4-triazolone,

5. A pharmaceutical composition comprising a therapeutically effective amount of a compound as defined in claim 1 or 4 and a pharmaceutically acceptable carrier or diluent.

6. A method of treating or preventing fungal infection in a mammal comprising administering to said mammal a therapeutically effective amount of a compound having the structure of Formula I



Formula I

and its pharmaceutically acceptable salts, enantiomers, diastereomers, N-oxides, prodrugs, metabolites, polymorphs , or pharmaceutically acceptable solvates,

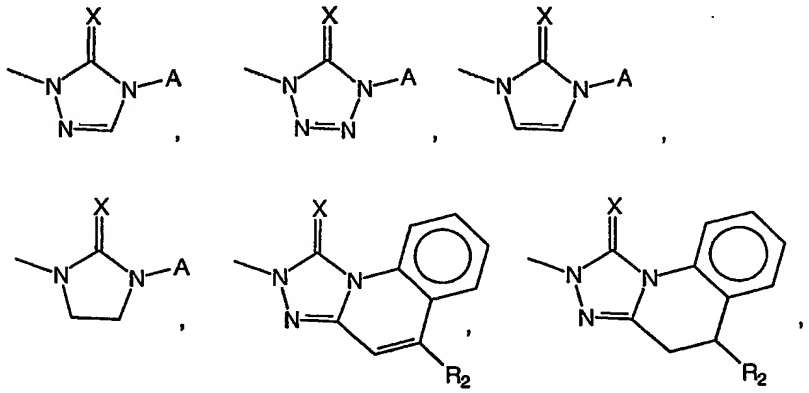
wherein

Az is a five to seven membered heterocyclic ring having one to four heteroatoms selected from N, S, or O; the preferred heterocyclic ring is 1,2,4-triazol-1-yl ;

Ar is a five to seven membered heterocyclic ring containing one to four heteroatoms selected from the group consisting of oxygen nitrogen and sulphur; phenyl or a substituted phenyl group having one to three substituents independently selected from halogen (e.g. chlorine, fluorine, bromine or iodine), nitro, cyano, lower(C_1-C_4) alkyl, lower (C_1-C_4) alkoxy or a perhalo lower (C_1-C_4) alkyl, perhalo lower(C_1-C_4) alkoxy ; the preferred heterocyclic rings are thienyl and pyridyl;

R is H or methyl;

R_1 is selected from the group consisting of



wherein

X is selected from the group consisting of CH_2 , O, S and SO_2;

R_2 is hydrogen or lower(C_1-C_4) alkyl;

A is hydrogen, lower(C_1-C_4) alkyl, phenyl or phenyl substituted by one or more of groups independently selected from halogen (e.g. chlorine, fluorine, bromine or iodine atoms), nitro, cyano, hydroxy, lower(C_1-C_4) alkyl, lower (C_1-C_4) alkoxy or perhalo lower (C_1-C_4) alkyl, perhalo lower (C_1-C_4)alkoxy ; substituted or unsubstituted five or six membered heterocyclyl ring systems containing one to four hetero atoms chosen from N, O and S, said heterocyclyl substituents being (C_1-C_8) alkanoyl, lower (C_1-C_4) alkyl, lower (C_1-C_4) alkoxy carbonyl, N, N-di(lower alkyl)

(C_1-C_4) amino carbonyl, aminothiocarbonyl, N-lower(C_1-C_4) alkyl aminothiocarbonyl, N,N-di(lower alkyl) (C_1-C_4) aminothiocarbonyl, lower (C_1-C_4) alkyl sulfonyl, phenyl substituted lower (C_1-C_4) alkyl sulfonyl, N-lower (C_1-C_4) alkylamino, N, N-di(lower alkyl) (C_1-C_4) amino, 1,3-imidazol-1-yl, 2-loweralkyl(C_1-C_4) sulfenyl-1,3-imidazol-1-yl, pyridinyl, thaizolyl, 1,2,4 triazol-4-yl or phenyl or phenyl substituted by one or more of groups independently selected from halogen (chlorine, fluorine, bromine or iodine), perhalo lower(C_1-C_4) alkyl, (C_2-C_8) alkanoyl, lower(C_1-C_4) alkyl, lower(C_1-C_4) alkyl substituted by one or more hydroxy group, lower(C_1-C_4) alkoxy, nitro, cyano, hydroxy, 1,2,4-triazolyl, 1,3-imidazolyl, 1,2,3,4-tetrazolyl.

7. A method of treating or preventing a fungal infection in a mammal comprising the step of administering to said mammal a therapeutically effective amount of the pharmaceutical composition according to claim 5.

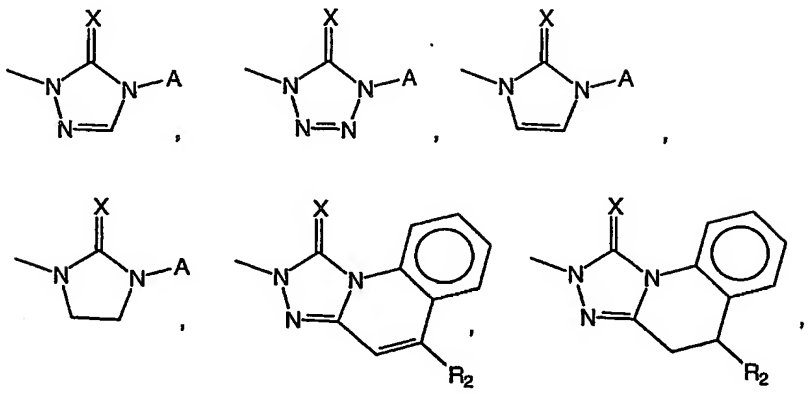
8. A process for preparing a compound of the Formula I, its pharmaceutically acceptable salts, enantiomers, diastereomers, N-oxides, prodrugs, metabolites, polymorphs, or pharmaceutically acceptable solvates

wherein

Az is a five to seven membered heterocyclic ring having one to four heteroatoms selected from N, S, or O; the preferred heterocyclic ring is 1,2,4-triazol-1-yl ;

Ar is a five to seven membered heterocyclic ring containing one to four heteroatoms selected from the group consisting of oxygen nitrogen and sulphur; phenyl or a substituted phenyl group having one to three substituents independently selected from halogen (e.g. chlorine, fluorine, bromine or iodine), nitro, cyano, lower(C_1-C_4) alkyl, lower (C_1-C_4) alkoxy or a perhalo lower (C_1-C_4) alkyl, perhalo lower(C_1-C_4) alkoxy ; the preferred heterocyclic rings are thienyl and pyridyl;

R is H or methyl;
R_1 is selected from the group consisting of



wherein

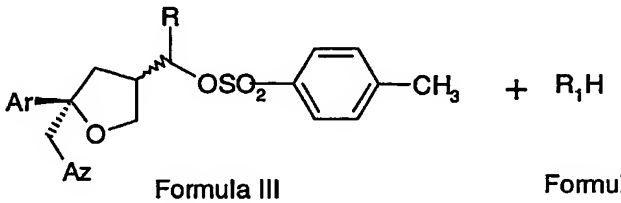
X is selected from the group consisting of CH_2, O, S and SO_2;

R_2 is hydrogen or lower(C_1-C_4) alkyl;

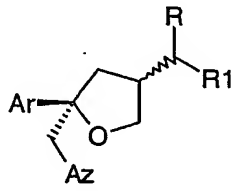
A is hydrogen, lower(C_1-C_4) alkyl, phenyl or phenyl substituted by one or more of groups independently selected from halogen (e.g. chlorine, fluorine, bromine or iodine atoms), nitro, cyano, hydroxy, lower(C_1-C_4) alkyl, lower(C_1-C_4) alkoxy or perhalo lower (C_1-C_4) alkyl, perhalo lower(C_1-C_4)alkoxy ; substituted or unsubstituted five or six membered heterocyclyl ring systems containing one to four hetero atoms chosen from N, O and S, said heterocyclyl substituents being (C_1-C_8) alkanoyl, lower (C_1-C_4) alkyl, lower (C_1-C_4) alkoxy carbonyl, N, N-di(lower alkyl) (C_1-C_4) amino carbonyl, aminothiocarbonyl, N-lower(C_1-C_4) alkyl aminothiocarbonyl, N,N-di(lower alkyl) (C_1-C_4) aminothiocarbonyl, lower (C_1-C_4) alkyl sulfonyl, phenyl substituted lower (C_1-C_4) alkyl sulfonyl, N-lower(C_1-C_4) alkylamino, N, N-di(lower alkyl) (C_1-C_4) amino, 1,3-imidazol-1-yl, 2-loweralkyl(C_1-C_4) sulfenyl-1,3-imidazol-1-yl, pyridinyl, thaizolyl, 1,2,4 triazol-4-yl or phenyl or phenyl substituted by one or more of groups independently selected from halogen (chlorine, fluorine, bromine or iodine), perhalo lower(C_1-C_4) alkyl, (C_2-C_8) alkanoyl, lower(C_1-C_4) alkyl, lower(C_1-C_4) alkyl substituted by one

or more hydroxy group, lower(C_1-C_4) alkoxy, nitro, cyano, hydroxy, 1,2,4-triazolyl, 1,3-imidazolyl, 1,2,3,4-tetrazolyl;

which comprises reacting a compounds of Formula III with a compound of Formula IV as shown below, where all symbols are as defined above.

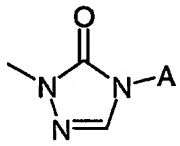


Formula III Formula IV

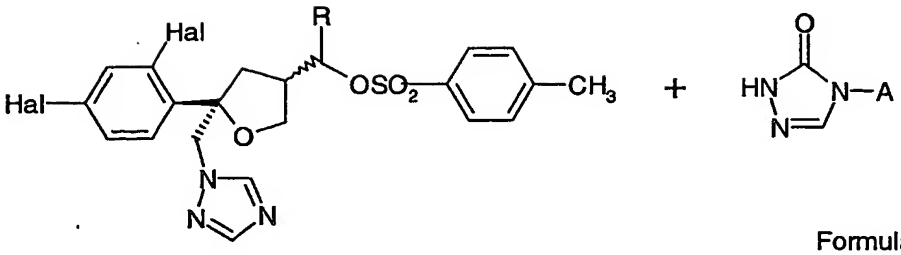


Formula I

9. A process according to claim 8 for preparing a compound of the Formula II (Formula I, wherein Az is 1,2,4-triazol -1-lyl; R is H or CH_3; Ar is 2, 4-dihalo substituted phenyl, Hal is Cl, F, Br or 1; and R_1 is



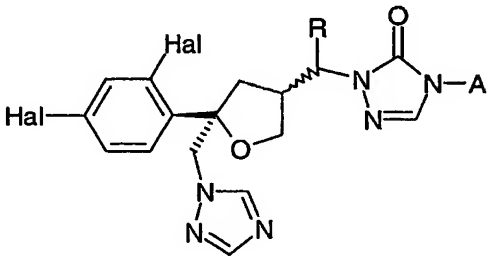
wherein A is the same as defined in claim 1, which comprises condensing 2,2,4 – trisubstituted tetrahydrofuran of the Formula V with 4 – substituted triazolone of Formula VI as shown below:



Formula V

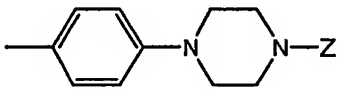
Formula VI

K_2CO_3/DMF/KBr or KI



Formula II

10. A process according to claim 9 for preparing a compound of Formula II, wherein A is represented by



Z is a hydrogen, (C_1-C_8) alkanoyl, lower alkyl, (C_1-C_8) perhaloalkanoyl, or phenyl, phenyl substituted by one or more of groups independently selected from nitro, cyano, halogen (chlorine, fluorine bromine, iodine) perhalo lower(C_1-C_4) alkyl, perhalo lower(C_1-C_4) alkoxy; (C_2-C_8) alkanoyl, lower(C_1-C_4) alkyl, lower (C_1-C_4)alkyl substituted by one or more hydroxy group, lower(C_1-C_4) alkoxy, 1,3-imidazolyl, 1,2,4-triazolyl, 1,2,3,4-tetrazolyl, or OCH_2Y ;wherein

Y is phenyl or phenyl substituted by one or more of groups independently selected from nitro, cyano, halo, perhalo lower alkyl, (C_2-C_8) alkanoyl lower

alkyl, hydroxy, lower alkyl substituted by one or more hydroxy group, lower alkoxy, 1,3-imidazolyl, 1,2,4-triazolyl or 1,2,3,4-tetrazolyl.

11. The process of claim 8 wherein the reaction of compound of formula III and formula IV is carried out in a suitable organic solvent wherein the solvent is selected from the group consisting of dimethylformamide, dimethyl sulfoxide, toluene, isopropyl alcohol, tetrahydrofuran, ethylene glycol, dimethyl ether, and mixtures thereof.

12. The process of claim 8 wherein the reaction of compound of formula III and formula IV is carried out in the presence a suitable base.

13. The process of claim 12 wherein the base is selected from the group consisting of sodium hydride, potassium carbonate, cesium carbonate, and sodium carbonate.